US ERA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

MEMORANDUM

JUL 1 1986

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SUBJECT:

Occupational Exposure Data Requirement for the

Registration of Avermectin

T0:

William Dykstra Review Section

Toxicology Branch/HED (TS-769)

FROM:

Curt Lunchick

Special Review Section
Exposure Assessment Branch

Hazard Evaluation Division (TS-769C)

THRU:

Joseph C. Reinert, Chief

Special Review Section

Exposure Assessment Branch

Hazard Evaluation Division (TS-769C)

As per our discussion I am providing the Toxicology Branch with the status of an occupational exposure assessment for avermectin. Avermectin is proposed for use on field crops and ornamentals at application rates of 0.005 to 0.02 lbs. a.i./acre. The methods of application would presumably be by ground boom, aerial, and hand hold sprayer. Depending on crop types, airblast application is possible.

EAB would require exposure studies for all these methods of application. The data would be required for mixer/loaders and applicators and the studies would be conducted according to the Jan. 1986 draft of Subdivision U-Applicator Exposure Monitoring Guidelines. The exposure studies would be required because our suurogate data base does not contain exposure data for the application rates proposed for avermectin.

It must be stated that the exposure data would be required only if the Toxicology Branch identifies a toxicology concern. EAB understands that such concerns may exist for teratogenicity and acute oral toxicity. If the Toxicology Branch reaches the conclusion, based on the toxicology data base for avermectin, that human toxicity concerns do not exist then exposure studies would not be required by EAB.

Should it be decided that exposure studies are required, a meeting with Merck and Co. is recommended.